4/1/06-00673

REVIEW COMMENTS
DRAFT– SUPPLEMENTAL SITE INVESTIGATION REPORT FOR SITE 21
ST. JULIENS CREEK ANNEX, CHESAPEAKE, VIRGINIA
APRIL 2006

Ref: (a) USEPA, "External Review Draft - Trichloroethylene Health Risk Assessment: Synthesis and Characterization." Aug. 2001.
(b) EQM. 2004. Environmental Quality Management, Inc. "User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings." Prepared by EQM, Inc. for USEPA. Revised Feb. 22, 2004.
(c) USEPA, 2002. "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway (Subsurface Vapor Intrusion Guidance)." Office of Solid Waste and Emergency Response, Washington, DC. EPA/530/F-02/052. Nov. 29, 2002.

General Comments:

1. The first two of the three stated objectives of this Supplemental Site Investigation relate to activities (develop treatment alternatives and evaluate risks) that generally garner the most attention after the nature and extent of contamination has been well documented and is better understood. While it is not too early to collect data that will help determine what treatment approaches may be appropriate for the site in the future, until the nature and extent of contamination (including the presence of dense non-aqueous phase liquids [DNAPL] and potential continuing sources) is better understood, it would be difficult to know: what areas require remediation, which media require remediation, when to 'stop' remediation, etc. At this point in the investigation, it seems that filling data gaps should also be considered goal.

2. It is not clear why the soil results are not discussed more in the report. This seems particularly inconsistent since the limited soil samples that were collected as part of this investigation indicated the presence of trichloroethylene (TCE) and other contaminants at rather significant concentrations (e.g., TCE in soil at 45,000 µg/kg). Due to the soil detections, it seems like any consideration of treatment would also need to consider the nature and extent of contamination in soil, and the possibility that soil could be a continuing source of contamination. While we agree that treatment will be necessary at this site, and that the treatment will likely focus on groundwater; before selecting treatment options, it seems like the potential for soil to serve as a continuing source would need to be evaluated. We recommend either including additional discussion of the soil results in the report, or at least presenting a discussion that explains why the soil will not be evaluated in the human health risk screening (HHRS). If there was a valid reason for excluding the soil data from being evaluated, please provide that explanation in the text.

3. The HHRS included a quantitative evaluation of the analytical results from the 26 temporary wells without discussing the uncertainty that this likely introduced into the evaluation. Typically, groundwater samples collected from temporary wells do not meet

the data quality objectives (DQOs) to be used in a human health risk assessment. It appears that this may be the case for this site based on text in Section 3.3.2 which describes the results collected from these wells as "somewhat turbid." We suggest reviewing the information collected from the temporary wells to determine if these are appropriate to use in the HHRS. Whether the analytical results from the temporary wells are retained for quantitative evaluation in the HHRS or not, we suggest adding text to the report that documents this decision so that this same question is not brought up during regulatory review. This type of documentation will also help make the HHRS evaluation transparent and reproducible.

4. The evaluation of potential effects to exposed human receptors was performed in two distinct steps: the HHRS and a separate evaluation of vapor intrusion. The HHRS uses available screening criteria to estimate potential risk to exposed human receptors while the vapor intrusion section relies on modeled indoor air concentrations and comparison to occupational standards and calculation of risk. While it is not necessarily incorrect to apply different approaches to these two types of evaluations, we recommend that consistent decision criteria, toxicity values, and guiding principles be applied to both evaluations. Furthermore, an explanation of why two different approaches were applied would help the reader understand the HHRS recommendations better. For example, even in a screening assessment such as this, all exposure routes from a single media would usually be added together. However, since different approaches were used to evaluate exposure to constituents in groundwater, this was not done for this report. The uncertainty section should also acknowledge that the vapor intrusion exposure route was not "added" to the exposures accounted for in the screening, which results in the assessment being less conservative than would usually be applied in a screening.

5. The HHRS uses different toxicity values for trichloroethylene in the two sections of the assessment. The HHRS screening for direct contact with groundwater uses the toxicity values included in ref (a) while the vapor intrusion assessment used toxicity values that have been withdrawn from the EPA's Integrated Risk Information System (IRIS). No explanation is given in this report as to why two different sets of TCE toxicity values were used. There is also no discussion in the report as to the uncertainty that using either set of these Tier 3 toxicity values introduces to the assessment.

6. The vapor intrusion screening risk assessment presented in this report does not provide sufficient documentation to support the conclusion that no further evaluation of vapor intrusion at the site is necessary. There are several specific comments listed below that should be addressed to document that the approach used in the assessment is appropriate for the site. One of the major pitfalls is that, despite numerous statements throughout the report that DNAPL may be present, the vapor intrusion assessment does not address this fact. Per ref (b), "The presence or suspected presence of residual or free-product non-aqueous phase liquids (LNAPL, DNAPL, fuels, solvents, etc.) in the subsurface," is a condition that "...preclude[s] the use of the Non-NAPL Models as implemented by EPA." In addition, the vapor intrusion assessment does not explain why the quantitative evaluation was limited to only three of the over twenty volatile organic compounds that were detected in groundwater near Building 1556. Specific comments # 15, 16, 19, and

20 below relate to rather serious problems/deficiencies with the vapor intrusion assessment that we recommend should be addressed.

Specific Comments:

1. Pages 2-2 and 2-3, Table 2-1 Historical Activities

The description of the historical activities at Former Building 249 (IR Site 9/14) does not specifically list chemicals that were used in the equipment maintenance activities; however Page 4-4 specifically lists the historical use of TCE both in this building and in other buildings that are not listed in this table. Since tables such as this provide a useful summary, we recommend that whenever possible this table lists the chemicals that were used in the buildings.

Additionally, this table seems to be incomplete when compared with Figure 2-3. Figure 2-3 depicts several current (e.g., Building 63) and former (e.g., Buildings 62, 54, 104, 139, 216, etc.) buildings that are not described in Table 2-1. This makes it difficult to verify that all historical uses have been accounted for when determining potential releases and sources of contamination. If information about these other buildings is available, we recommend adding it to Table 2-1. If information about these other buildings is not available, that should be specifically stated in the report.

2. Page 2-4, Section 2.2.3 Previous Investigations, Site Screening Assessment

The text states that "...human health and ecological risk screenings were conducted..." to evaluate several possible outcomes. We recommend at least briefly including the recommendations resulting from the ecological risk screening. The reader may assume that no ecological risks were identified since the SSA recommendations were based on the potential for human health risks, but this may be an incorrect assumption since ecological risks were also evaluated in the Site Investigation.

3. Page 2-5, Section 2.2.3 Previous Investigations, Site Investigation
Page 3-2, Section 3.2.3. Groundwater Sampling

Page 2-5 states that, "Seven shallow groundwater monitoring wells (SJS21-MW01S through MW07S) were installed..." during the Site Investigation in August 2003. Please verify that this is correct. This statement conflicts with information on Page 3-2 about when monitoring well MW07S was installed. Page 3-2 states that, "A total of 12 groundwater samples were collected in November 2004; six from existing shallow monitoring wells (SJS21-MW01S through MW06S)... and five from the newly installed shallow monitoring wells (SJS21-MW07S through MW11S)." The text on Page 3-2 appears to agree with the analytical data presented for monitoring well MW07S in Appendix D.

4. Figure 2-3 Site 21 Vicinity

Since Building 1556 is the specific focus of the vapor intrusion evaluation presented in Section 5.2, please label the building on this figure. The reader should not have to determine the location of the building based on information included in the text that describes why certain monitoring wells were sited at particular locations.

5. Page 4-4, Section 4.1.3 Shallow Aquifer Analytical Results, Laboratory Results.

The paragraph that presents the results for the "Southeast Corner of Demolished Building 54" is the first time that former Building 54 is mentioned in the document. The historical activities and chemicals used there should be included in Table 2-1.

6. Page 4-4, Section 4.1.3 Shallow Aquifer Analytical Results, Laboratory Results.

The last sentence in the paragraph for the "Building 46 Area" currently reads, "Since data is spatially inconsistent with historically documented sources, another, undocumented release is likely." Although this may be an appropriate conclusion, we recommend editing the sentence by replacing the word "another" with "an" so that the text does not give the impression that numerous undocumented releases could have occurred.

7. Table 4-4 Shallow Groundwater Detections and Exceedances of Screening Criteria

The MCL shown for chlorobenzene is from the July 2002 version of the MCLs. The updated version (Winter 2004) does not include an MCL for chlorobenzene. Therefore we recommend that the old value from July 2002 be deleted from this table. A footnote should be added to the table that gives the reference to the version of the MCLs that were used in this table.

The footnote for this table says that shaded cells are used to indicate exceedances of the background UTL. However, the shading does not seem like it was applied consistently. For example, any detected result of a VOC would usually be considered 'greater than background', although these detections were not shaded. Similarly, the detected result for phenol in MW09S from December 2004 is not shaded, although other detections for SVOCs are shaded. Please review this table and ensure that the shading is applied consistently or the rationale for shading/not shading cells is explained more clearly in the footnote.

Finally, a review of this table shows that for a few constituents (e.g., 2-methylnaphthalene and BEHP), the detection limits were consistently greater than the MCL and/or the background UTL. This suggest that the data quality objectives (DQOs) either were not met or were not set appropriately. In these instances, the text should discuss these instances since the detection limits reported on this table were not sufficient to determine if the compounds were present at the screening levels.

8. Table 4-4 Shallow Groundwater Detections and Exceedances of Screening Criteria
   Table 4-6 Deep Groundwater Detections and Exceedances of Screening Criteria
   Table 4-7 Stormwater and Surface Water Detections

Typically data summary tables such as this one are not censored. Although it is not incorrect to only show the "most conservative" result of the parent and a duplicate sample, doing so prevents the reader from reviewing that information and making their own conclusions. If the table is not updated to include both the parent and duplicate results, please clarify the footnote so the reader understands what was considered "most conservative" in cases where the parent and duplicate have one estimated detection and one non-detected result.

9. Table 4-7 Stormwater and Surface Water Detections

The EPA's National Recommended Ambient Water Quality Criteria could be shown on this table as screening values. Although these criteria would not necessarily apply directly to the stormwater samples, they may be useful for the surface water sample.

10. Page 5-1, Section 5 Human Health Risk Screening and Vapor Intrusion Assessment

The second paragraph on this page currently reads, "On the basis of the results and conclusions of the SI (detailed in Section 2.2.3), potential ecological risks do not warrant further evaluation." We recommend deleting the words "detailed in" since the discussion in Section 2.2.3, while sufficient, can not be considered detailed.

11. Page 5-1, Section 5 Human Health Risk Screening and Vapor Intrusion Assessment

Although this is a screening assessment and not a baseline human health risk assessment, it is still important to document all procedures used and assumptions made so that it can be confirmed that the assessment is appropriate and the results are reproducible. To this end, it may be useful to include at least a brief data evaluation section in the HHRS. Typically, an HHRS is performed when only very limited data are available which is not the case for the shallow groundwater evaluated in this assessment. Therefore this HHRS may need to address data evaluation topics that are not usually a concern for sites when only a few analytical results are available. Specific information that would be useful includes:

- a list of exactly what samples were included and excluded from the quantitative assessment
- a discussion of the temporal trends (or lack thereof) observed in the groundwater data to document the appropriateness of combining data from multiple sampling events.
- a discussion that explains how the data from the temporary wells meets the DQOs and is appropriate for quantitative evaluation.

12. Page 5-1, Section 5.1.1 Methodology

Although the October 2005 RBCs were the most current version of RBCs available when this assessment was completed, we recommend updating this to the April 2006 RBCs prior to finalizing the document. The tap water RBCs for chlorobenzene and trans-1,2-

DCE were changed in the April 2006 RBC table. Although the updated values will not change the conclusions of the HHRS, it should be performed with the most recent information available. Alternatively, if the RBCs are not updated in the report, we recommend removing the reference to "the most current version of the RBCs" and inserting a statement that the updated RBCs for these two compounds do not change the results of the HHRS.

13. Page 5-2, Section 5.1.1 Methodology, Step 3 Screening

The discussion here does not provide sufficient information to allow the reader to easily recalculate the UCLs. Although this is not a baseline human health risk assessment, the procedures used should still be sufficiently transparent so that the results are reproducible. We recommend that this section is updated to include the following information:

- what proxy value was used for non-detected results;
- what value was used when a duplicate sample was available; and
- how qualified data were used to calculate the UCLs.

Per General Comment #3, it may not be appropriate to include the temporary well data in the HHRS. However, if the temporary well data is determined to meet the DQOs and is retained for the HHRS, this should be discussed in this section. Also, if the temporary wells are retained for this assessment, the text in this section needs to be updated to accurately describe how ProUCL tests the data distribution for large datasets. The current reference to the W-test is incorrect for datasets as large as the shallow groundwater dataset that was evaluated for this assessment.

14. Page 5-3, Section 5.1.2 Results, Shallow Groundwater

The second to last paragraph in this section presents conclusions regarding several detected constituents that are considered "not indicative of a site release." Although this may be an appropriate conclusion, since there is no formal nature and extent of contamination section in this report, it may not be appropriate to present these conclusions in the HHRS. For example, although bis(2-ethylhexyl)phthalate was only detected in 1 out of 12 samples, the singe detection (73 µg/L) exceeded its MCL (6 µg/L) and is much higher than would typically be seen with "laboratory contamination." Additionally, although heptachlor epoxide was only detected in 2 out of 12 groundwater samples, the detection in MW12S is located near the former Building 249 which according to Table 2-1 was associated with pesticide handling.

These types of conclusions at this point in the assessment may raise concerns during review by regulators. Although there may be valid reasons for not considering these constituents in a risk assessment, it may appear to regulators that adequate support for this based on nature and extent is not provided in this document. We recommend either providing additional justification for these conclusions, or removing these conclusions from this section of the report.

15. Page 5-4, Section 5.2 Vapor Intrusion Assessment

Despite numerous statements throughout the document that DNAPL may be present at portions of the site, including the area around Building 1556, this vapor intrusion assessment never mentions that DNAPL may be present at the site and that if DNAPL is present, the modeling presented in this section is useless and must be disregarded. Until the nature and extent of contamination is better documented, including the presence of DNAPL, the vapor intrusion assessment can not be used to document that there are no risks to current receptors exposed to volatiles from a subsurface source in indoor air.

16. Page 5-4, Section 5.2 Vapor Intrusion Assessment

We recommend that this section includes a discussion as to how the constituents were selected that were evaluated for the vapor intrusion pathway. The quantitative evaluation for vapor intrusion was limited to 3 of the 22 substances that were detected in the vicinity (i.e., within 100 feet laterally) of Building 1556 that are considered sufficiently volatile and toxic according to ref (c). Although we do not recommend updating this evaluation until the presence of DNAPL can be determined, we recommend that any updated assessments should follow the guidance provided in ref (c), particularly in regards to which chemicals should be quantitatively evaluated.

17. Table 5-6 Groundwater to Indoor Air Parameters Used in the Johnson and Ettinger Model

The selected value for the average temperature of groundwater shown on the table (14°C) is based on generic defaults. Since site-specific data is available, it may be appropriate to use the measured groundwater temperatures in the model. Page 4-1 reported that the measured groundwater temperatures ranged from 20°C to 25°C. In this case, the use of the default value of 14°C is not as conservative as the site-specific values.

18. Page 5-7, Section 5.2.4 Results

The last paragraph on this page uses incorrect units for the inhalation unit risk factors and incorrectly identifies an inhalation unit risk factor as a cancer slope factor. The sentences currently read, "The calculated risk for TCE, based on the unit risk factor currently withdrawn from Integrated Risk Information System (IRIS) of 1.7 × 10-6 µg/m3, is 1.9 × 10-5. For VC, the calculated risk, based on USEPA's cancer slope factor of 8.8 × 10-6, is 6.4 × 10-6. These risks fall within USEPA's range of acceptable risk (10-6 to 10-4)."

We recommend changing this text so it reads, "The calculated risk for TCE, based on the unit risk factor currently withdrawn from Integrated Risk Information System (IRIS) of 1.7×10^{-6} per $\mu g/m^3$, is 1.9×10^{-5}. For VC, the calculated risk, based on the inhalation unit risk factor from IRIS of 8.8×10^{-6} per $\mu g/m^3$, is 6.4×10^{-6}. These risks fall within USEPA's range of acceptable risk (10^{-6} to 10^{-4})."

19. Page 5-7, Section 5.2.4 Results

The last sentence of this section states, "Therefore, potential vapor intrusion of TCE, VC, and cis-1,2-DCE into Building 1556 does not warrant further action to reduce potential health risks."

It is not clear why the calculated risks were not considered cumulative, as would be appropriate with any risk assessment (and as was done in Section 5.1). We recommend evaluating all sufficiently volatile and toxic constituents detected near the building, and then adding the individual cancer risks and critical effect hazard quotients. These cumulative values could then be compared to the same 'target levels' as the HHRS.

If the same toxicity values were used in this part of the assessment as were used in Section 5.1, the excess lifetime cancer risk to the industrial worker exposed only to TCE in indoor air would be 1.2E-03, which would have resulted in a different conclusion for this assessment.

20. Page 5-8, Section 5.2.5 Uncertainties

Considering the complexity of the vapor intrusion pathway, and the approach that was applied to evaluating vapor intrusion at this site, even for a screening level assessment the uncertainty section has missed several important factors. We recommend that at least the following major sources of uncertainty be included:

- A discussion about the possible presence of DNAPL at the site and the impact that confirmation of DNAPL would have on the model results (that is, that the entire assessment and the conclusions drawn from it would be invalid).

- A discussion about the possible presence of preferential pathways under the building. Page 3-4 includes information that the installation of a temporary well in the northern portion of the building was prevented because an abandoned utility was encountered. In addition, Section 5.2.1 mentions expansion joints are present. These expansion joints, combined with the presence of two sumps, are conditions that the Johnson and Ettinger model does not account for. Therefore the model results can not necessarily be described as "overly conservative."

- A discussion regarding the use of the withdrawn TCE toxicity values needs to be added. This is particularly important since the toxicity values used in this section are different than the ones that were used in the evaluation in Section 5.1.

- A discussion about the fact that this exposure route was considered separate from the other groundwater exposure pathways evaluated in Section 5.1 should be added.

21. Table 5-1 HHRS Step 1, Shallow Groundwater – Occurrence, Distribution, and Selection of COPCs Based on Comparison to RBCs and Background

a. This table shows that 12 samples were evaluated for SVOCs and total metals. However, Table 4-4 includes results for 13 samples that were analyzed for SVOCs and total metals (SJS21-MW01S-03C, SJS21-MW02S-03C, SJS21-MW03S-03C, SJS21-MW04S-03C, SJS21-MW05S-03C, SJS21-MW06S-03C, SJS21-MW07S-04D, SJS21-MW08S-04D, SJS21-MW09S-04D, SJS21-MW10S-04D, SJS21-MW11S-04D, SJS21-MW12S-05D, and SJS21-MW13S-05D). Please either explain which sample was excluded from consideration and why it was excluded, or update the analysis to include all 13 samples.

b. Please verify the detection frequency shown for molybdenum. Table 4-4 shows three detected results out of five samples while this table reports two detected results out of four samples. Please either explain which sample was excluded from consideration and why or update the analysis to include all 5 samples.

c. The MCLs for methylene chloride (5 µg/L) and bis(2-ethylhexyl)phthalate (6 µg/L) should be included on this table.

d. The MCL shown on this table for toluene (100 µg/L) is incorrect. The table should be updated with the correct MCL (1,000 µg/L).

e. The MCL shown on this table for beta-BHC is actually for gamma-BHC. Please either remove this value or add a footnote that explains the MCL for gamma-BHC is shown as a surrogate.

f. Footnote #4 for vinyl chloride should refer to the tap water RBC rather than the SSL.

22. Table 5-2 HHRS Step 2, Shallow Groundwater – Risk Ratio Calculation for COPCs

The target organ/critical effect listed for molybdenum is incorrect. IRIS lists the critical effect for oral exposure to molybdenum as increased uric acid, which should ultimately be referred to as an effect on the kidney. The increased uric acid was measured in the blood, but it is damage to the kidney that causes this increase. Please note that this will also change the COPC selection for molybdenum and therefore it should not be carried forward to Step 3 of the evaluation.

23. Table 5-3 HHRS Step 3, Shallow Groundwater – Risk Ratio Calculation for COPCs Based on UCL or Maximum Detected Concentrations

a. If the datasets for SVOCs and arsenic change per Specific Comment #22, the UCL calculations should be updated.

b. Please verify the reported UCL and basis on this table for RDX. Instead of a UCL this table currently shows the maximum detected concentration for RDX.

24. Table 5-5 HHRS Step 2, Deep Groundwater – Risk Ratio Calculation for COPCs

The screening toxicity criteria for 1,3-dinitrobenzene and vanadium on this table are still based on a target hazard index of 0.1. Please correct this so they are based on a target hazard index of 1. Please note that after this correction is made, chromium will no longer be considered a COPC based.

25. Page 6-1, Section 6.1.1 Investigation Results

The last paragraph in Section 6.1.1 states that "Reductive dechlorination of TCE is also resulting in the formation of the daughter products…in some areas of the site…" This information is not reported anywhere else in the report. We recommend adding text to Section 4.2.3 that describes which portions of the site this is occurring at so that new information is not presented for the first time in the Conclusions section of the report.

The last paragraph states that "Residual petroleum contamination may be facilitating the reductive dechlorination process in these areas." The available groundwater analytical results in this report do not appear to support the presence of residual petroleum contamination. The soil samples collected during this investigation were not analyzed for presence of SVOCs or TPH, according to Table D-4. However, both of the areas referred to in this section (south of former Building 187 and near former Building 249) had historical use and spills of petroleum products. We recommend that this sentence be removed from the report since there is no data to support the presence of residual petroleum contamination. Furthermore, to suggest that residual contamination exists on the site may result in additional unwarranted investigations to chase down contamination that may not actually exist.

26. Page 6-2, Section 6.1.2 HHRS and Vapor Intrusion Assessment Results

We recommend including supporting information for the conclusion that based on a single deep well that, "…the deep groundwater does not appear to have been impacted by Site 21 activities based on the isolated low-level detections of COPCs and the existence of a laterally extensive hydraulic aquitard." Considering that only one well was sampled, referring to these detections as "isolated" seems to misrepresent the evaluation.

27. Page 6-2, Section 6.2 Recommendations, Potential Presence of DNAPL

The last sentence of this section states, "…and depth specific groundwater samples may be useful in confirming the presence or absence of DNAPL." We recommend that this text be rewritten to clarify if additional groundwater samples from the Yorktown aquifer are being recommended. Furthermore, if this text was not intended to refer to the Yorktown aquifer, we suggest providing an explanation as to why that would not be recommended. Based on the information included on page 4-8 (i.e., "If the volume of any of the releases at Site 21 was sufficient to provide enough mass of DNAPL to reach the Yorktown Confining Unit, the DNAPL most likely collected on the Yorktown clay and possibly continued to move under the force of gravity down the slope of the aquitard."), the presence of contamination in the Yorktown aquifer is a data gap that should be addressed.

Editorial Comments:

1. Page 4-1, Section 4.1.1 Soil CVOC Results

The section title suggests that only chlorinated volatile organic compound (CVOC) results will be discussed in this section. Since this section presents information regarding non-chlorinated VOCs (i.e., acetone and carbon disulfide), we recommend changing the section title to "Soil VOC Results."

2. Page 4-1, Section 4.1.1 Soil CVOC Results
   Page 4-7, Section 4.2 Contaminant Phases

Please introduce and spell out DNAPL during its first occurrence in the document on Page 4-1 rather than at its second occurrence on Page 4-7.

3. Page 4-3, Section 4.1.3 Shallow Aquifer Analytical Results, Volatile Organic Compounds

The first paragraph includes a series list that includes commas in the names of certain chemicals. In these instances the items in the series list should be separated by semicolons instead of commas.

4. Page 4-3, Section 4.1.3 Shallow Aquifer Analytical Results, Volatile Organic Compounds

The first sentence of the third paragraph reads, "TCE and its degradation products (cis-1,2-DCE, and VC) were detected at varying concentrations across the site." Delete the comma after "DCE" so the parenthetical statement reads, "(cis-1,2-DCE and VC)."

5. Page 4-4, Section 4.1.3 Shallow Aquifer Analytical Results, Laboratory Results.

The paragraph that discusses the results for the area "West Side of Building 201" uses incorrect units (µg/L) to discuss soil analytical results. These should be changed from "µg/L" to "µg/kg."

6. Page 4-5, Section 4.1.3 Shallow Aquifer Analytical Results, Pesticides/PCBs

There is a typo in the units in the second-to-last sentence of this section. Please change "...the background UTL of 0.056 µg/ and..." to "...the background UTL of 0.056 µg/L and..."

7. Page ?, Table 5-2 HHRS Step 2, Shallow Groundwater – Risk Ratio Calculation for COPCs

The notes for "CNS" and "HI" can be deleted since these are not used on the table. A note for the qualifier "L" should be added.

8. Table 5-4 HHRS Step 1, Deep Groundwater – Occurrence, Distribution, and Selection of COPCs Based on Comparison to RBCs and Background

The footnotes "K", "L", and "ND" can be deleted since they are not used on the table.